



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,027	12/31/2003	John C. Pederson	E30.2-9125US03	9351

490 7590 11/03/2004

VIDAS, ARRETT & STEINKRAUS, P.A.  
6109 BLUE CIRCLE DRIVE  
SUITE 2000  
MINNETONKA, MN 55343-9185

EXAMINER

LEE, BENJAMIN C

ART UNIT PAPER NUMBER

2632

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/750,027

Applicant(s)

PEDERSON, JOHN C.

Examiner

Benjamin C. Lee

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 22-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/16/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 59-86 have been renumbered 22-49 (after Applicant's cancellation of original claims which consist of claims 1-21, instead of the erroneously indicated "1-58" by Applicant).

### ***Claim Status***

2. Claims 22-49 are pending. ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 36 and 43-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Montalan et al. (US pat. #5,490,049).

1) In considering claim 36:

Montalan et al. discloses the claimed light emitting diode assembly comprising:

a) a housing, said housing comprising a plurality of adjacent substantially conical reflector cavities (302), each of said cavities having a top and a bottom (Figs. 1-3); b) at least one light

Art Unit: 2632

emitting diode (404) disposed within each reflector cavity proximate to said bottom (Figs. 1-3); and c) a base (100 having protrusions 106 and mounting means 102, 104), said base constructed and arranged for engagement to a vehicle (col. 3, lines 18-23 and col. 4, lines 52-55).

2) In considering claim 43, Montalan et al. met all of the claimed subject matter as in claim 36, including:

--the claimed said light emitting diode assembly further comprising a transparent face (200, 500 according to col. 8, lines 10-12) proximate to said top of said cavities.

3) In considering claim 44, Montalan et al. met all of the claimed subject matter as in claim 36, including:

--the claimed said light emitting diode assembly further comprising a translucent face (200, 500 according to col. 8, lines 13-16) proximate to said top of said cavities.

4) In considering claim 45, Montalan et al. met all of the claimed subject matter as in claim 36, including:

--the claimed said light emitting diode assembly further comprising a protective cover (200 of Figs. 1-3) proximate to said top of said cavities.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montalan et al.

1) In considering claim 37, Montalan et al. met all of the claimed subject matter as in claim 36, wherein:

While Montalan et al. only shows the profile depiction of the housing, since the light signaling assembly block of Montalan et al. is for the rear end of a motor vehicle and is conventionally designed to perform a plurality of lighting functions such as side-marker light, brake light, turn indicator light, fog light, etc. in various specific zones (col. 3, lines 18-23) and since such lights conventionally include substantially rectangular housing shapes, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to use substantially rectangular housing.

2) In considering claim 38, Montalan et al. render all of the claimed subject matter obvious as in claim 37, including:

--the claimed said housing comprising at least three reflector cavities (Figs. 1-3 & 6).

3) In considering claim 39, Montalan et al. render all of the claimed subject matter obvious as in claim 38, including:

--the claimed, said reflector cavities defining a central cavity and two opposite end cavities, said central cavity and said two opposite end cavities being aligned along a common longitudinal axis (Figs. 1-2 & 6).

4) In considering claim 40, Montalan et al. render all of the claimed subject matter obvious as in claim 38, including:

--the claimed said reflector cavities defining a central cavity and two opposite end cavities, said central cavity and said two opposite end cavities being regularly spaced along a common longitudinal axis (Figs. 1-2 & 6).

5) In considering claim 41, Montalan et al. render all of the claimed subject matter obvious as in claim 38, including:

--the claimed said cavities being in contact with each other (Fig. 2).

6) In considering claim 42, Montalan et al. render all of the claimed subject matter obvious as in claim 38, including:

--the claimed said cavities being separated from each other (Fig. 1).

7. Claims 22-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montalan et al. in view of Kouchi et al. (US pat. #4,868,719).

1) In considering claim 22, Montalan et al. met all of the claimed subject matter as in the consideration of claim 36, except:

--the claimed said housing reflector cavities are substantially cylindrical.

While Montalan et al. uses conical reflector cavities, Kouchi et al. teaches the known use of substantially cylindrical LED reflector cavities (Figs. 2-3) in a vehicle signaling light assembly.

In view of the teachings by Montalan et al. and Kouchi et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that conical and cylindrical reflector cavities constitute known alternatives in vehicle signaling light assemblies, such that the substantially cylindrical reflector cavities of Kouchi et al. can be chosen for a vehicle signaling light assembly of Montalan et al. depending on the user's preference of the visual impact resulting from the use of cylindrical reflector cavities.

2) In considering claim 23-31, Montalan et al. and Kouchi et al. render all of the claimed subject matter obvious as in claim 22, plus the consideration of claims 37-45 above, respectively.

8. Claims 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montalan et al. in view of Meinershagen (US pat. #4,556,862).

1) In considering claims 46-48, Montalan et al. met all of the claimed subject matter as in claim 36, wherein:

Montalan et al. teaches that the LED light signaling assembly is for the rear end of a motor vehicle and is conventionally designed to perform a plurality of lighting functions such as side-marker light, brake light, turn indicator light, fog light, etc. in various specific zones (col. 3, lines 18-23) without specifying its control aspects.

Meinershagen disclosed in the same vehicle signaling art a vehicle external warning light system (Figs. 13-14 & 17) using a plurality of light emitters (lamps of Figs. 14 and 17) controlled by a controller (129 of col. 9, lines 9-10) in electric communication with the light emitters (Fig. 17) and constructed and arranged to selectively activate the light emitters thereby producing at least two different types of visually distinct warning light signals (left turn, right turn, braking, etc. according to col. 3, line 14 to col. 4, line 40 and Fig. 17) in at least one combination comprising at least one pattern of light signals (left moving light pattern, right moving light pattern, etc), said light emitters receiving power from a power source (71 of Fig. 17).

In view of the teachings by Montalan et al. and Meinershagen, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to use an LED light assembly block such as taught by Montalan et al. to implement a controller-controlled vehicle

Art Unit: 2632

signaling system such as taught by Meinershagen so that the LED assembly provides an improved warning light signal having brighter outputs with longer operating life and lower power consumption.

2) In considering claim 49, Montalan et al. and Meinershagen render all of the claimed subject matter obvious as in claim 47, including:

--the claimed at least one sequence of light signals is met by the sequential activations shown in Tables 1-3 and 5 of Meinershagen.

9. Claims 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montalan et al. in view of Kouchi et al. and Meinershagen.

1) In considering claim 32-35, Montalan et al. and Kouchi et al. render all of the claimed subject matter obvious as in claim 22, plus the consideration of claims 46-49 further in view of Meinershagen above, respectively.

#### **Regarding IDS filed 3/16/04**

10. Notice: 9 of the Foreign Patent Documents listed on PTO-1449 filed 3/16/04 were not listed in parent US Patent No. 6,800,502 (Application No. 09/586,100), and thus were not considered by Examiner since no copy of the 9 documents were available.

#### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (571) 272-2963. The examiner can normally be reached on Mon -Fri 11:00Am-7:30Pm.



Art Unit: 2632

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Benjamin C. Lee  
Primary Examiner  
Art Unit 2632

B.L.